

Serial Number: 09/715,962CRF Processing Date: 12/6/2000Edited by: JAVerified by: JA

(STIC staff)

☐

Changed a file from non-ASCII to ASCII

☐

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐

Edited a format error in the Current Application Data section, specifically:

☐Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_☐

Added the mandatory heading and subheadings for "Current Application Data".

☐

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐

Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_

☐

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_

☐

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_

☐

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐

Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_

☐

Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_

☐Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_☐

Inserted mandatory headings, specifically: \_\_\_\_\_

☐

Corrected an obvious error in the response, specifically: \_\_\_\_\_

☐

Edited identifiers where upper case is used but lower case is required, or vice versa.

☐

Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_

☐

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_☒Other: Seq 4, 6 - corrected amino acid nos.

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/715,962  
 DATE: 12/14/2000  
 TIME: 19:43:26

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\12142000\I715962.raw

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1 <110> APPLICANT: Bayer Aktiengesellschaft
2 <120> TITLE OF INVENTION: GABA-B-Rezeptoren
3 <130> FILE REFERENCE: Lo A 34 074
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/715,962
C--> 10 <141> CURRENT FILING DATE: 2000-11-17
12 <150> PRIOR APPLICATION NUMBER: DE 199 53 408.0
13 <151> PRIOR FILING DATE: 1999-11-18
15 <160> NUMBER OF SEQ ID NOS: 6
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 2523
21 <212> TYPE: DNA
22 <213> ORGANISM: Drosophila melanogaster
24 <220> FEATURE:
25 <221> NAME/KEY: CDS
26 <222> LOCATION: (1)..(2520)
28 <400> SEQUENCE: 1
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30 Met Arg Lys Asp Met Thr Ser Asp Gly Ala Val Thr Phe Trp Ile Phe
31 1 5 10 15
33 ttg ctt tgt tta atc gcc tgg cca cac ctg caa ggg ggc gtg gcc gag 96
34 Leu Leu Cys Leu Ile Ala Ser Pro His Leu Gln Gly Gly Val Ala Gly
35 20 25 30
37 aag ccc gat gaa ctg cac atc gcc gcc atc ttt cgg ata gcc gcc aaa 144
38 Arg Pro Asp Glu Leu His Ile Gly Gly Ile Phe Pro Ile Ala Gly Lys
39 35 40 45
41 gga gga tgg cag gcc gcc cag ggg tgt atg cct gcc aca aga ctg gcc 192
42 Gly Gly Trp Gln Gly Gly Gln Ala Cys Met Pro Ala Thr Arg Leu Ala
43 50 55 60
45 ttg gat gat gtc aac aag cag cgg aat ctg ctg cgg gcc ttc aag ctc 240
46 Leu Asp Asp Val Asn Lys Gln Pro Asn Leu Leu Pro Gly Phe Lys Leu
47 65 70 75 80
49 atc ctg cac agc aac gac agc gag tgt gag ccc gat ttg gcc gcc agc 288
50 Ile Leu His Ser Asn Asp Ser Glu Cys Glu Pro Gly Leu Gly Ala Ser
51 85 90 95
53 ttg atg tac aat ctg ctg tat aat aaa cgg caa aag ctg atg ctg ttg 336
54 Val Met Tyr Asn Leu Leu Tyr Asn Lys Pro Gln Lys Leu Met Leu Leu
55 100 105 110
57 gca gga tgc agc aag gtc tgc acc act gla gcc gag gcl gcc aaa atg 384
58 Ala Gly Cys Ser Thr Val Cys Thr Thr Val Ala Glu Ala Ala Lys Met
59 115 120 125
61 tgg aat cta att gtc ctg tgc tac ggg gcc tgg agt cgg gct ctt tgg 432
62 Trp Asn Leu Ile Val Leu Cys Tyr Gly Ala Ser Ser Pro Ala Leu Ser
63 130 135 140
65 gat cgc aaa cga ttc ccc act cta ttc cgc acc cgt cca tgg gcc acg 480
66 Asp Arg Lys Arg Phe Pro Thr Leu Phe Arg Thr His Pro Ser Ala Thr
67 145 150 155 160

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,962

DATE: 12/14/2000

TIME: 13:48:26

Input Set : A:\Pto.amc

Output Set: N:\CRF3\12142000\I715962.raw

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70 Val His Asn Pro Thr Arg Ile Lys Leu Met Lys Lys Phe Gly Trp Ser
71 165 170 175
73 cgg gta gcc att ctg cag cag gcg gaa gaa atc ttt ata tca acc ata 578
74 Arg Val Ala Ile Leu Gln Gln Ala Glu Val Phe Ile Ser Thr Val
75 186 185 190
77 gaa gat ctc gaa aat cca tgc atg gaa gct ggc gtt gaa atc gta act 624
78 Glu Asp Leu Glu Asn Arg Cys Met Glu Ala Gly Val Glu Ile Val Thr
79 195 200 205
81 aag caa tca ttt cta tcc gat cca acc gac gcc gta cgc aat ttg cga 672
82 Arg Gln Ser Phe Leu Ser Asp Thr Asp Ala Val Arg Asn Leu Arg
83 210 215 220
85 cgc cag gat gca cgc atc att atg gga ctc ttc tat atg gta gcc gcc 720
86 Arg Gln Asp Ala Arg Ile Val Gly Leu Phe Tyr Val Val Ala Ala
87 225 230 235 240
89 aag aag gta ctc tgc gaa atg tac aaa cag caa cta tat aac cga gct 768
90 Arg Arg Val Leu Cys Glu Met Tyr Lys Gln Glu Leu Tyr Gly Arg Ala
91 245 250 255
93 cat gta tgg ttc ttt att gac tgg tac gag gac aac tgg tac gag gta 816
94 His Val Trp Phe Phe Ile Gly Trp Tyr Glu Asp Asn Trp Tyr Glu Val
95 260 265 270
97 aat ctg aaa gca gag ggc atc acc tgc act gtt gaa cag atg cga ata 864
98 Asn Leu Lys Ala Gln Gly Ile Thr Cys Thr Val Glu Glu Met Arg Ile
99 275 280 285
101 gct gcc gaa gaa cat ctg acc acg gaa gca ctc atg tgg aat cag aac 912
102 Ala Ala Glu Gly His Leu Thr Thr Glu Ala Leu Met Trp Asn Gln Asn
103 290 295 300
105 aat cag aca act ata tcc gga atg act gca gaa gaa ttt cga cat cga 960
106 Asn Gln Thr Thr Ile Ser Gly Met Thr Ala Glu Glu Phe Arg His Arg
107 305 310 315 320
109 ctg aat cag gcg cta atc aag gaa ggt tac gac att aac cac gat cgc 1008
110 Leu Asn Gln Ala Leu Ile Glu Glu Gly Tyr Asp Ile Asn His Asp Arg
111 325 330 335
113 tat cgg gag gga tat cag gag gcg cca ctc gcc tac gat gca gta tgg 1056
114 Tyr Pro Glu Gly Tyr Gln Glu Ala Pro Leu Ala Tyr Asp Ala Val Trp
115 340 345 350
117 agt gta gct ttg gct ttc aac aag acc atg gaa cga ttg aca acc ggg 1104
118 Ser Val Ala Leu Ala Phe Asn Lys Thr Met Glu Arg Leu Thr Thr Gly
119 355 360 365
121 aag aaa tct ctg agg gat ttt acc tat acg gac aag gag att gcc gat 1152
122 Lys Lys Ser Leu Arg Asp Phe Thr Tyr Thr Asp Lys Glu Ile Ala Asp
123 370 375 380
125 gaa atc tac gct gcc atg aac tcc aca caa ttt ctg ggt gta tca ggt 1200
126 Glu Ile Tyr Ala Ala Met Asn Ser Thr Gln Phe Leu Gly Val Ser Gly
127 385 390 395 400
129 gta gta gca ttc agt tct cag gcc gat cgt att gct ctt aca cag atc 1248
130 Val Val Ala Phe Ser Ser Gln Gly Asp Arg Ile Ala Leu Thr Gln Ile
131 405 410 415
133 gaa cag atg ata gac ggc aag tac gag aag ttg ggt tac tac gat act 1296

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## RAW SEQUENCE LISTING

PATENT APPLICATION: ES/09/715,962

DATE: 12/14/2000

TIME: 19:48:26

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Output Set: H:\CRF3\12142000\I715962.raw

134	Glu	Gln	Met	Ile	Asp	Gly	Lys	Tyr	Glu	Lys	Leu	Gly	Thr	Tyr	Asp	Thr	
135				420					425					430			
137	cag	ttg	aat	aac	cta	tcg	tgg	tgg	aat	act	gaa	cag	tgg	att	gat	ggc	1344
138	Gln	Leu	Asp	Asn	Leu	Ser	Trp	Leu	Leu	Thr	Glu	Gln	Trp	Ile	Gly	Gly	
139				435					440					445			
141	aaq	gtt	cct	caa	gat	cgc	aca	att	gtc	acc	cat	glt	cta	cgc	acc	gtg	1392
142	Lys	Val	Pro	Gln	Asp	Arg	Thr	Ile	Val	Thr	His	Val	Leu	Arg	Thr	Val	
143				450					455					460			
145	tcg	ttg	cca	tta	ttt	gtg	tgc	atg	tgc	aca	ata	tcg	agt	tgt	ggc	ata	1440
146	Ser	Leu	Pro	Leu	Phe	Val	Cys	Met	Cys	Thr	Ile	Ser	Ser	Cys	Gly	Ile	
147	465								470					475			480
149	ttc	gtt	ggc	ttc	ggc	tta	atc	atc	ttt	aat	ata	tgg	aat	aaq	cat	aaa	1488
150	Phe	Val	Ala	Phe	Ala	Leu	Ile	Ile	Phe	Asn	Ile	Trp	Asn	Lys	His	Arg	
151				485					490					495			
153	aga	gta	ata	caa	tcg	tcg	cat	ccc	gtt	tgc	aat	acg	atc	atg	tta	ttt	1536
154	Arg	Val	Ile	Gln	Ser	Ser	His	Pro	Val	Cys	Asn	Thr	Ile	Met	Leu	Phe	
155				500					505					510			
157	ggt	gtc	atc	atc	tgt	cta	ata	tct	gtc	atc	tta	ctg	ggc	atc	ggc	gga	1584
158	Gly	Val	Ile	Ile	Cys	Leu	Ile	Ser	Val	Ile	Leu	Leu	Gly	Ile	Asp	Gly	
159				515					520					525			
161	cgc	ttt	gtc	agg	ccc	gag	gaa	tat	cca	aaq	ata	tgt	caa	ggc	ggg	gct	1632
162	Arg	Phe	Val	Ser	Pro	Glu	Glu	Tyr	Pro	Lys	Ile	Cys	Gln	Ala	Arg	Ala	
163				530					535					540			
165	tgg	tta	cta	tcg	acc	ggg	ttt	aca	cta	gca	tac	ggt	gct	atg	ttc	agc	1680
166	Trp	Leu	Leu	Ser	Thr	Gly	Phe	Thr	Leu	Ala	Tyr	Gly	Ala	Met	Phe	Ser	
167	545								550					555			560
169	aaq	gtc	tgg	cgt	gtg	cat	cgt	ttt	aca	aca	aaa	gca	aaa	act	ggc	cca	1728
170	Lys	Val	Trp	Arg	Val	His	Arg	Phe	Thr	Lys	Ala	Lys	Thr	Asp	Pro		
171				565					570					575			
173	aaq	aaa	aaa	gtg	gaa	cct	tgg	aag	cta	tac	acc	atg	gtt	tcg	ggg	cta	1776
174	Lys	Lys	Lys	Val	Glu	Pro	Trp	Lys	Leu	Tyr	Thr	Met	Val	Ser	Gly	Leu	
175				580					585					590			
177	tta	tcg	ata	gat	tta	gtg	ata	tta	ctc	tca	tgg	cag	atc	ttt	gat	ccg	1824
178	Leu	Ser	Ile	Asp	Leu	Val	Ile	Leu	Leu	Ser	Trp	Gln	Ile	Phe	Asp	Pro	
179				595					600					605			
181	crg	cag	cgt	tat	ctc	gaa	aca	ttc	cca	ctc	gaa	gat	cca	gta	tct	act	1872
182	Leu	Gln	Arg	Tyr	Leu	Glu	Thr	Phe	Pro	Leu	Glu	Asp	Pro	Val	Ser	Thr	
183				610					615					620			
185	act	gat	gat	att	aaa	ata	cgt	cca	gag	ctt	gag	cat	tgt	gaa	agt	caa	1920
186	Thr	Asp	Asp	Ile	Lys	Ile	Arg	Pro	Glu	Leu	Glu	His	Cys	Glu	Ser	Gln	
187	625								630					635			640
189	cgc	aac	tcg	atg	tgg	ttg	ggg	ctt	gta	tac	ggc	ttc	aaq	ggg	cta	atc	1968
190	Arg	Asn	Ser	Met	Trp	Leu	Gly	Leu	Val	Tyr	Gly	Phe	Lys	Gly	Leu	Ile	
191				645					650					655			
193	ctg	gtg	ttt	ggc	ctc	ttt	ttg	ggc	tac	gag	acg	cgc	tcg	att	aaa	gtg	2016
194	Leu	Val	Phe	Gly	Leu	Phe	Leu	Ala	Tyr	Glu	Thr	Arg	Ser	Ile	Lys	Val	
195				660					665					670			
197	aaa	cag	atc	aac	gat	tcg	cgt	tat	gtg	ggc	atg	agc	atc	tat	aac	gtg	2064
198	Lys	Glu	Ile	Asn	Asp	Ser	Arg	Tyr	Val	Gly	Met	Ser	Ile	Tyr	Asn	Val	

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,962

DATE: 12/14/2000

TIME: 19:48:26

Input Set : A:\Pto.amc

Output Set : N:\CRF3\12142000\I715962.raw

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109          675          680          685
251 gtc gtc ctt tgc ctg ata aca gct cca gtc ggc atg gtc att gca tgc 2112
252 Val Val Leu Cys Leu Ile Phe Ala Pro Val Gly Met Val Ile Ala Ser
253 690          695          700
254 cca cca cca ggc tcc ttt gcc ttc att gct cta gct ccg ata ttc tat 2160
255 Gln Gln Asp Ala Ser Phe Ala Phe Val Ala Leu Ala Val Ile Phe Cys
256 705          710          715          720
257 ttt ttt cca agc atg ctg ctg ata ttt gtc cca aag gtc att gaa gtt 2208
258 Cys Phe Leu Ser Met Leu Leu Ile Phe Val Pro Lys Val Ile Gln Val
259 725          730          735
260 ata gct cat gcc aag gat aag gcc gaa tcc aca tac aat ccc gat tca 2256
261 Ile Arg His Pro Lys Asp Lys Ala Gln Ser Lys Tyr Asn Pro Asp Ser
262 740          745          750
263 gcc ata tcc aca gaa gac gaa aca cgc tat caa aac gtt gtt acc gaa 2304
264 Ala Ile Ser Lys Gln Asp Gln Gln Arg Tyr Gln Lys Leu Val Thr Gln
265 755          760          765
266 aac gag cca tta cca cga tta ata aca cag aag gag gaa aag att cca 2352
267 Asn Gln Gln Leu Gln Arg Leu Ile Thr Gln Lys Gln Gln Lys Ile Arg
268 770          775          780
269 gtc ctg cca caa cgt ctg gtc gaa cga gcc gcc aac gcc aca gaa 2400
270 Val Leu Arg Gln Arg Leu Val Gln Arg Gly Asp Ala Lys Gly Thr Gln
271 785          790          795          800
272 ctg aat ggt gca aca ggt atc gcc tcc gcc gcc gtt gca aca act tgc 2448
273 Leu Asn Gly Ala Thr Gly Val Ala Ser Ala Ala Val Ala Thr Thr Ser
274 805          810          815
275 cag gcc gct tcc ctg atc aac tca tca gca cat gcc aag ccc gca gcc 2496
276 Gln Pro Ala Ser Leu Ile Asn Ser Ser Ala His Ala Thr Pro Ala Ala
277 820          825          830
278 aca ctg cca atc aca caa ggt gaa tag 2523
279 Thr Leu Ala Ile Thr Gln Gly Gln
280 835          840
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243 <211> LENGTH: 840
244 <212> TYPE: PRT
245 <213> ORGANISM: Drosophila melanogaster
247 <400> SEQUENCE: 2
248 Met Arg Lys Asp Met Thr Ser Asp Gly Ala Val Thr Phe Trp Ile Phe
249 1 5 10 15
251 Leu Leu Cys Leu Ile Ala Ser Pro His Leu Gln Gly Gly Val Ala Gly
252 20 25 30
254 Arg Pro Asp Gln Leu His Ile Gly Gly Ile Phe Pro Gln Ala Gly Lys
255 35 40 45
257 Gly Gly Trp Gln Gly Gly Gln Ala Cys Met Pro Ala Thr Arg Leu Ala
258 50 55 60
260 Leu Asp Asp Val Asn Lys Gln Pro Asn Leu Leu Pro Gly Phe Lys Leu
261 65 70 75 80
263 Ile Leu His Ser Asn Asp Ser Gln Cys Gln Pro Gly Leu Gly Ala Ser
264 85 90 95
266 Val Met Tyr Asn Leu Leu Tyr Asn Lys Pro Gln Lys Leu Met Leu Leu

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DATE: 12/14/2000

TIME: 19:48:36

INPUT SET: N:\CRF3\12142000\I715962.raw



VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/715,962      DATE: 12/14/2000  
TIME: 19:48:27

Input Set : A:\Pto.amc  
Output Set: H:\CRF3\12142000\I715962.raw

L:9 H:270 C: Current Application Number differs. Replaced Application Number  
L:10 H:271 C: Current Filing Date differs. Replaced Current Filing Date

OIPE

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/715,962  
 DATE: 12/06/2000  
 TIME: 15:14:42

Input Set : A:\LeA34074.txt  
 Output Set: N:\CRF3\12062000\I715962.raw

Does Not Comply  
 Corrected Diskette Needed

4 <110> APPLICANT: Bayer Aktiengesellschaft  
 5 <120> TITLE OF INVENTION: GABA-B-Rezeptoren  
 6 <130> FILE REFERENCE: Le A 34 074  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/715,962  
 C--> 10 <141> CURRENT FILING DATE: 2000-11-17  
 12 <150> PRIOR APPLICATION NUMBER: DE 199 55 408.0  
 13 <151> PRIOR FILING DATE: 1999-11-18  
 15 <160> NUMBER OF SEQ ID NOS: 6  
 17 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

728 <210> SEQ ID NO: 4  
 729 <211> LENGTH: 1320  
 730 <212> TYPE: PRP  
 731 <213> ORGANISM: Drosophila melanogaster  
 733 <400> SEQUENCE: 4  
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 735 1 5 10 15  
 737 Leu Trp Ser Thr Ala Cys Gly Arg Thr Ala Lys Arg Ser Asp Val Tyr  
 738 20 25 30  
 740 Ile Ala Gly Phe Phe Pro Tyr Gly Asp Gly Val Glu Asn Ser Tyr Thr  
 741 35 40 45  
 743 Gly Arg Gly Val Met Pro Ser Val Lys Leu Ala Leu Gly His Val Asn  
 744 50 55 60  
 746 Glu His Gly Lys Ile Leu Ala Asn Tyr Arg Leu His Met Trp Trp Asn  
 747 65 70 75 80  
 749 Asp Thr Glu Cys Asn Ala Ala Val Gly Val Lys Ser Phe Phe Asp Met  
 750 85 90 95  
 752 Met His Ser Gly Pro Asn Lys Val Met Leu Phe Gly Ala Ala Cys Thr  
 753 100 105 110  
 755 His Val Thr Asp Pro Ile Ala Lys Ala Ser Lys His Trp His Leu Thr  
 756 115 120 125  
 758 Glu Leu Ser Tyr Ala Asp Thr His Pro Met Phe Thr Lys Asp Ala Phe  
 759 130 135 140  
 761 Pro Asn Phe Phe Arg Val Val Pro Ser Glu Asn Ala Phe Asn Ala Pro  
 762 145 150 155 160  
 764 Arg Leu Ala Leu Leu Lys Glu Phe Asn Trp Thr Arg Val Gly Thr Val  
 765 165 170 175  
 767 Tyr Glu Asn Glu Pro Arg Tyr Ser Leu Pro His Asn His Met Val Ala  
 768 180 185 190  
 770 Asp Leu Asp Ala Met Glu Val Glu Val Val Glu Thr Glu Ser Phe Val  
 771 195 200 205  
 773 Asn Asp Val Ala Glu Ser Leu Lys Lys Leu Arg Glu Lys Asp Val Arg  
 774 210 215 220  
 776 Ile Ile Leu Gly Asn Phe Asn Glu His Phe Ala Arg Lys Ala Phe Cys



## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,962

Date: 12/06/2000

Time: 15:34:12

Input Set : A:\LeA34074.txt

Output Set: N:\CRF3\12062000\I715962.raw

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777 225          240          235          246
778 Glu Ala Tyr Lys Leu Asp Met Tyr Gly Arg Ala Tyr Gln Trp Leu Ile
779          245          250          255
780 Met Ala Thr Tyr Ser Thr Asp Trp Trp Asp Val Thr Gln Asp Ser Gln
781          260          265          270
782 Cys Ser Val Glu Gln Ile Ala Thr Ala Leu Glu Gly Ala Ile Leu Val
783          275          280          285
784 Asp Leu Leu Pro Leu Ser Thr Ser Gly Asp Ile Thr Val Ala Gly Ile
785          290          295          300
786 Thr Ala Asp Gln Tyr Leu Val Glu Tyr Asp Arg Leu Arg Gly Thr Glu
787          305          310          315          320
788 Tyr Ser Arg Phe His Gly Trp Thr Tyr Asp Gly Ile Trp Ala Ala Ala
789          325          330          335
790 Leu Ala Ile Gln Tyr Val Ala Gln Lys Arg Gln Asp Leu Leu Thr His
791          340          345          350
800 Phe Asp Tyr Arg Val Lys Asp Trp Glu Ser Val Phe Leu Glu Ala Leu
801          355          360          365
802 Arg Asn Thr Ser Phe Gln Gly Val Thr Gly Pro Val Arg Phe Tyr Asn
803          370          375          380
804 Asn Glu Arg Lys Ala Asn Ile Leu Ile Asn Gln Phe Gln Leu Gly Gln
805          385          390          395          400
806 Met Glu Lys Ile Gly Glu Tyr His Ser Gln Lys Ser His Leu Asp Leu
807          405          410          415
812 Ser Leu Gly Lys Pro Val Lys Trp Val Gly Lys Thr Pro Pro Lys Asp
813          420          425          430
814 Arg Thr Leu Ile Tyr Ile Gln His Ser Gln Val Asn Pro Thr Ile Tyr
815          435          440          445
816 Ile Val Ser Ala Ser Ala Ser Val Ile Gly Val Ile Ile Ala Thr Val
817          450          455          460
821 Phe Leu Ala Phe Asn Ile Lys Tyr Arg Asn Gln Arg Tyr Ile Lys Met
822          465          470          475          480
823 Ser Ser Pro His Leu Asn Asn Leu Ile Ile Val Gly Cys Met Ile Thr
824          485          490          495
827 Tyr Leu Ser Ile Ile Phe Leu Gly Leu Asp Thr Thr Leu Ser Ser Val
828          500          505          510
830 Ala Ala Phe Pro Tyr Ile Cys Thr Ala Arg Ala Trp Ile Leu Met Ala
831          515          520          525
833 Gly Phe Ser Leu Ser Phe Gly Ala Met Phe Ser Lys Thr Trp Arg Val
834          530          535          540
836 His Ser Ile Phe Thr Asp Leu Lys Leu Asn Lys Lys Val Ile Lys Asp
837          545          550          555          560
838 Tyr Gln Leu Phe Met Val Val Gly Val Leu Leu Ala Ile Asp Ile Ala
839          565          570          575
842 Ile Ile Thr Thr Trp Gln Ile Ala Asp Pro Phe Tyr Arg Gln Thr Lys
843          580          585          590
845 Gln Leu Gln Pro Leu His His Glu Asn Ile Asp Asp Val Leu Val Ile
846          595          600          605
848 Pro Glu Asn Glu Tyr Cys Gln Ser Glu His Met Thr Ile Phe Val Ser
849          610          615          620

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,962

DATE: 12/06/2000

TIME: 15:14:12

Input Set : A:\LeA34074.txt

Output Set: N:\CRF3\12062000\I715962.raw

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832 825 630 935 640
834 Ala Trp Gln Thr Arg His Val Ser Ile Pro Ala Leu Asn Asp Ser Lys
835 645 850 655
837 His Ile Gly Phe Ser Val Tyr Asn Val Phe Ile Thr Cys Leu Ala Gly
838 660 865 870
860 Ala Ala Ile Ser Leu Val Leu Ser Asp Arg Lys Asp Leu Val Phe Val
861 675 880 885
863 Leu Leu Ser Phe Phe Ile Ile Phe Cys Thr Thr Ala Thr Leu Cys Leu
864 690 695 700
866 Val Phe Val Pro Lys Leu Val Glu Leu Lys Arg Asn Pro Gln Gly Val
867 705 710 715 720
869 Val Asp Lys Arg Val Arg Ala Thr Leu Arg Pro Met Ser Lys Asn Gly
870 725 730 735
872 Arg Arg Asp Ser Ser Val Cys Glu Leu Glu Gln Arg Leu Arg Asp Val
873 740 745 750
875 Lys Asn Thr Asn Cys Arg Phe Arg Lys Ala Leu Met Glu Lys Glu Asn
876 755 760 765
878 Glu Leu Gln Ala Leu Ile Arg Lys Leu Gly Pro Gln Ala Arg Lys Trp
879 770 775 780
881 Ile Trp Gly Val Thr Cys Thr Gly Gly Ser Asn Val Gly Ser Gln Leu
882 785 790 795 800
884 Glu Pro Ile Leu Asn Asp Asp Ile Val Arg Leu Ser Ala Pro Pro Val
885 805 810 815
887 Arg Arg Gln Met Pro Ser Thr Thr Val Thr Glu Met Thr Ser Val Asp
888 820 825 830
890 Ser Val Thr Ser Thr His Val Glu Met Asp Asn Ser Phe Val Ser Val
891 835 840 845
893 Glu Ser Thr Val Met Ala Pro Ser Leu Pro Pro Lys Lys Lys Gln
894 850 855 860
896 Ser Ile Val Glu His His Ser His Ala Pro Ala Pro Thr Met Met Gln
897 865 870 875 880
899 Pro Ile Gln Gln Gln Leu Gln Gln His Leu Gln Gln His Gln Gln Met
900 885 890 895
902 Gln Gln Gln His Leu Gln Gln Gln Gln His Gln Gln Met Gln Gln Gln
903 900 905 910
905 Glu Gln Gln Gln Gln His His His Arg His Leu Glu Lys Arg Asn Ser
906 915 920 925
908 Val Ser Ala Gln Thr Asp Asp Asn Ile Gly Ser Ile Thr Ser Thr Ala
909 930 935 940
911 Gly Lys Arg Ser Gly Gly Asp Cys Ser Ser Met Arg Glu Arg Arg Gln
912 945 950 955 960
914 Ser Thr Ala Ser Arg His Tyr Asp Ser Gly Ser Gln Thr Pro Thr Ala
915 965 970 975
917 Arg Pro Lys Tyr Ser Ser Ser His Arg Asn Ser Ser Thr Asn Ile Ser
918 980 985 990
920 Thr Ser Gln Ser Glu Leu Ser Asn Met Cys Pro His Ser Lys Pro Ser
921 995 1000 1005
923 Thr Pro Ala Val Ile Lys Thr Pro Thr Ala Ser Asp His Arg Arg Thr

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,962

BJJL: 12/06/2000

TIME: 15:14:12

Input Set : A:\LeA34074.txt

Output Set: N:\CRF3\12062000\1715962.raw

```

924      1010      1015      1020
925 Ser Met Gly Ser Ala Leu Lys Ser Asn Phe Val Val Ser Gln Ser Asp
E--> 927 1025/1025      1030      1035      1040
929 Leu Trp Asp Thr His Thr Leu Ser His Ala Lys Gln Arg Gln Ser Pro
930      1045      1050      1055
932 Arg Asn Tyr Ala Ser Pro Gln Arg Cys Ala Gln His His Gly Gly His
933      1060      1065      1070
935 Gly Met Thr Tyr Asp Pro Asn Thr Thr Ser Pro Ile Gln Arg Ser Val
936      1075      1080      1085
938 Ser Gln Lys Asn Arg Asn Lys His Arg Pro Lys Pro Gln Lys Gly Thr
939      1090      1095      1100
941 Val Cys Gln Ser Gln Thr Asp Ser Gln Arg Gln Arg Asp Pro Pro Pro
E--> 942 1105/1105      1110      1115      1120
944 Asn Ser Gln Pro Cys Val Gln Pro Arg Lys Val Ser Arg Ser Ser Asn
945      1125      1130      1135
947 Ile Gln His Ala Ala His His His Ser Ser Pro Asn Val Ala Pro Asn
948      1140      1145      1150
950 Lys Gln Arg Ser Arg Gln Arg Gly Lys Gln Asp Ser Ser Ile Tyr Gly
951      1155      1160      1165
953 Ala Ser Ser Gln Thr Gln Leu Leu Gln Gly Gln Thr Ala Ile Leu Pro
954      1170      1175      1180
956 Ile Phe Arg Lys Leu Leu Thr Gln Lys Ser Pro Asn Tyr Arg Gly Arg
E--> 957 1185/1185      1190      1195      1200
959 Ser Ala Val Gly Gln Ser Cys Pro Asn Ile Ser Ile Lys Cys Asp Ile
960      1205      1210      1215
962 Val Gln Tyr Leu
963      1220
1306 <210> SEQ ID NO: 6
1307 <211> LENGTH: 1305
1308 <212> TYPE: PR1
1309 <213> ORGANISM: Drosophila melanogaster
1311 <400> SEQUENCE: 6
1312 Met Arg Ile Ile Gln Pro Val Gln Gly Thr Arg Tyr Gly Pro Trp Pro
1313      1      5      10      15
1315 Ala Val Gly Leu Arg Leu Val Leu Ala Leu Ala Trp Ala Thr Ser Ala
1316      20      25      30
1318 Ala Ala Ala Met Gln Ser Ser Ala Gln Leu Gln Ala Leu Gly His Gln
1319      35      40      45
1321 Ala Ile Arg Pro Gly Ala Ala Ser Ile Ser Thr Ser Ser Pro Ser Ser
1322      50      55      60
1324 Ser Pro Pro Gly Gln Ser Ala Ser Thr Val Thr Ala Gly Gly Thr Pro
1325      65      70      75      80
1327 Ile Pro Pro Arg Ser Asp Trp Lys Tyr Lys Arg Thr Lys Val Lys Arg
1328      85      90      95
1330 Arg Gln Gln Arg Leu Asn Ser His Ser Asn Leu Pro Gly Ser Thr Asn
1331      100      105      110
1333 Ala Ser His Ala His His Leu Leu Asn Leu Pro Pro Arg Gln Arg Tyr
1334      115      120      125
1336 Leu Lys Val Asn Gln Val Phe Gln Ser Gln Arg Arg Met Ser Pro Ala

```

## RAW SEQUENCE LISTING

DATE: 12/06/2000

FILE APPLICATION: US/09/715,962

TIME: 15:14:13

Input Set : A:\LeA34074.txt

Output Set: B:\CRF3\12062000\I715962.raw

```

1337      140      135      149
1339 Glu Met Gln Arg Asn His Gly Lys Ile Val Ieu Ieu Gly Ieu Phe Gln
1340 145      150      155      160
1342 Ieu Ser Thr Ser Arg Gly Pro Arg Pro Asp Gly Ieu Ser Glu Ieu Gly
1343      165      170      175
1345 Ala Ala Thr Met Ala Val Glu His Ile Asn Arg Lys Arg Ieu Ieu Pro
1346      180      185      190
1348 Gly Tyr Thr Ieu Glu Ieu Val Thr Asn Asp Thr Gln Cys Asp Pro Gly
1349      195      200      205
1351 Val Gly Val Asp Arg Phe Phe His Ala Ile Tyr Thr Gln Pro Ser Thr
1352      210      215      220
1354 Arg Met Val Met Ieu Ieu Gly Ser Ala Cys Ser Glu Val Thr Glu Ser
1355 225      230      235      240
1357 Ieu Ala Lys Val Val Pro Tyr Trp Asn Ile Val Gln Val Ser Phe Gly
1358      245      250      255
1360 Ser Thr Ser Pro Ala Ieu Ser Asp Arg Arg Glu Phe Pro Tyr Phe Tyr
1361      260      265      270
1363 Arg Thr Val Ala Pro Asp Ser Ser His Asn Pro Ala Arg Ile Ala Phe
1364      275      280      285
1366 Ile Arg Lys Phe Gly Trp Gly Thr Val Thr Thr Phe Ser Gln Asn Glu
1367      290      295      300
1369 Glu Val His Ser Ieu Ala Val Asn Asn Ieu Val Thr Glu Ieu Glu Ala
1370 305      310      315      320
1372 Ala Asn Ile Ser Cys Ala Ala Thr Ile Thr Phe Ala Ala Thr Asp Phe
1373      325      330      335
1375 Lys Glu Glu Ieu Ieu Ieu Ieu Arg Glu Thr Asp Thr Arg Ile Ile Ile
1376      340      345      350
1378 Gly Ser Phe Ser Glu Glu Ieu Ala Pro Gln Ile Ieu Cys Glu Ala Tyr
1379      355      360      365
1381 Arg Ieu Arg Met Phe Gly Ala Asp Tyr Ala Trp Ile Ieu His Glu Ser
1382      370      375      380
1384 Met Gly Ala Pro Trp Trp Pro Asp Gln Arg Thr Ala Cys Ser Asn His
1385 385      390      395      400
1387 Glu Ieu Gln Ieu Ala Val Glu Asn Ieu Ile Val Val Ser Thr His Asn
1388      405      410      415
1390 Ser Ile Val Gly Asn Asn Val Ser Tyr Ser Gly Ieu Asn Asn His Met
1391      420      425      430
1393 Phe Asn Ser Gln Ieu Arg Lys Gln Ser Ala Gln Phe His Gly Gln Asp
1394      435      440      445
1396 Gly Phe Gly Ser Gly Tyr Gly Pro Arg Ile Ser Ile Ala Ala Thr Gln
1397      450      455      460
1399 Ser Asp Ser Arg Arg Arg Arg Arg Gly Val Val Gly Thr Ser Gly
1400 465      470      475      480
1402 Gly His Ieu Phe Pro Gln Ala Ile Ser Gln Tyr Ala Pro Gln Thr Tyr
1403      485      490      495
1405 Asp Ala Val Trp Ala Ile Ala Ieu Ala Ieu Arg Ala Ala Glu Glu His
1406      500      505      510
1408 Trp Arg Arg Asn Glu Glu Gln Ser Lys Ieu Asp Gly Phe Asp Tyr Thr
1409      515      520      525

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,962

DATE: 12/06/2000

TIME: 11:14:13

Input Set : A:\IeA34074.txt

Output Set: N:\CRF3\12062000\1715962.raw

```

1411 Arg Ser Asp Met Ala Trp Glu Phe Leu Gln Gln Met Gly Lys Leu His
1412      530      535      540
1414 Phe Thr Gly Val Ser Gly Pro Val Ser Phe Ser Gly Pro Asp Arg Val
1415 545      550      555      560
1417 Gly Thr Thr Ala Phe Tyr Gln Ile Gln Arg Gly Leu Leu Glu Pro Val
1418      565      570      575
1420 Ala Leu Tyr Tyr Pro Ala Thr Asp Ala Leu Asp Phe Arg Cys Pro Arg
1421      580      585      590
1423 Cys Arg Pro Val Lys Trp His Ser Gly Gln Val Pro Ile Ala Lys Arg
1424      595      600      605
1426 Val Phe Lys Leu Arg Val Ala Thr Ile Ala Pro Leu Ala Phe Tyr Thr
1427      610      615      620
1429 Ile Ala Thr Leu Ser Ser Val Gly Ile Ala Leu Ala Ile Thr Phe Leu
1430 625      630      635
1432 Ala Phe Asn Leu His Phe Arg Lys Leu Lys Ala Ile Lys Leu Ser Ser
1433      645      650      655
1435 Pro Lys Leu Ser Asn Ile Thr Ala Val Gly Cys Ile Phe Val Tyr Ala
1436      660      665      670
1438 Thr Val Ile Leu Leu Gly Leu Asp His Ser Thr Leu Pro Ser Ala Glu
1439      675      680      685
1441 Asp Ser Phe Ala Thr Val Cys Thr Ala Arg Val Tyr Leu Leu Ser Ala
1442      690      695      700
1444 Gly Phe Ser Leu Ala Phe Gly Ser Met Phe Ala Lys Thr Tyr Arg Val
1445 705      710      715      720
1447 His Arg Ile Phe Thr Arg Thr Gly Ser Val Phe Lys Asp Lys Met Leu
1448      725      730      735
1450 Gln Asp Ile Gln Leu Ile Leu Leu Val Gly Gly Leu Leu Val Asp
1451      740      745      750
1453 Ala Leu Leu Val Thr Leu Trp Val Val Thr Asp Pro Met Glu Arg His
1454      755      760      765
1456 Leu His Asn Leu Thr Leu Glu Ile Ser Ala Thr Asp Arg Ser Val Val
1457      770      775      780
1459 Tyr Gln Pro Gln Val Glu Val Cys Arg Ser Gln His Thr Gln Thr Trp
1460 785      790      795      800
1462 Leu Ser Val Leu Tyr Ala Tyr Lys Gly Leu Leu Val Val Gly Val
1463      805      810      815
1465 Tyr Met Ala Trp Glu Thr Arg His Val Lys Ile Pro Ala Leu Asn Asp
1466      820      825      830
1468 Ser Gln Tyr Ile Gly Val Ser Val Tyr Ser Val Val Ile Thr Ser Ala
1469      835      840      845
1471 Ile Val Val Val Leu Ala Asn Leu Ile Ser Glu Arg Val Thr Leu Ala
1472      850      855      860
1474 Phe Ile Thr Ile Thr Ala Leu Ile Leu Thr Ser Thr Thr Ala Thr Leu
1475 865      870      875      880
1477 Cys Leu Leu Phe Ile Pro Lys Leu His Asp Ile Trp Ala Arg Asn Asp
1478      885      890      895
1480 Ile Ile Asp Pro Val Ile His Ser Met Gly Leu Lys Met Glu Cys Asn
1481      900      905      910
1483 Thr Arg Arg Phe Val Val Asp Asp Arg Arg Glu Leu Gln Tyr Arg Val

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,962

Exptl: 12/06/2000

FILE: 15:14:13

Input Set : A:\LeA34074.txt

Output Set: N:\CRF3\12062000\1715962.raw

```

1484          915          920          925
1486 Glu Val Glu Asn Arg Val Tyr Lys Lys Glu Ile Val Ala Leu Asp Ala
1487          930          935          940
1488 Glu Ile Asn Lys Leu Glu Arg Leu Leu Glu Ser Gly Leu Thr Thr Thr
1490 945          950          955          960
1492 Ser Thr Thr Thr Ser Ser Thr Ser Leu Leu Thr Gly Gly Gly His
1493          965          970          975
1495 Leu Lys Pro Glu Leu Thr Val Thr Ser Gly Ile Ser Gln Thr Pro Ala
1496          980          985          990
1498 Ala Ser Lys Asn Arg Thr Pro Ser Ile Ser Gly Ile Leu Pro Asn Leu
1499          995          1000          1005
1501 Leu Leu Ser Val Leu Pro Pro-Val Ile Pro Arg Ala Ser Trp Pro Ser
1502          1010          1015          1020
1504 Ala Glu Tyr Met Glu Ile Pro Met Arg Arg Ser Val Thr Phe Ala Ser
E--> 1505 025          1030          1035          1040
1507 Glu Pro Glu Leu Glu Glu Ala Cys Leu Pro Ala Glu Asp Leu Ile Asn
1508          1045          1050          1055
1510 Leu Arg Leu Ala His Glu Glu Ala Thr Glu Ala Lys Thr Gly Leu Ile
1511          1060          1065          1070
1513 Asn Arg Leu Arg Gly Ile Phe Ser Arg Thr Thr Ser Ser Asn Lys Gly
1514          1075          1080          1085
1516 Ser Thr Ala Ser Leu Ala Asp Gln Lys Gly Leu Lys Ala Ala Phe Lys
1517          1090          1095          1100
1519 Ser His Met Gly Leu Phe Thr Arg Leu Ile Pro Ser Ser Gln Thr Ala
E--> 1520 105          1110          1115          1120
1522 Ser Cys Asn Ala Ile Tyr Asn Asn Pro Asn Gln Asp Ser Ile Pro Ser
1523          1125          1130          1135
1525 Glu Ala Ser Ser His Pro Asn Gly Asn His Leu Lys Pro Ile His Arg
1526          1140          1145          1150
1528 Gly Ser Leu Thr Lys Ser Gly Thr His Leu Asp His Leu Thr Lys Asp
1529          1155          1160          1165
1531 Pro Asn Phe Leu Pro Ile Pro Thr Ile Ser Gly Gly Glu Glu Gly Asp
1532          1170          1175          1180
1534 Glu Thr Leu Gly Gly Lys Tyr Val Lys Leu Leu Glu Thr Lys Val Asn
E--> 1535 185          1190          1195          1200
1537 Phe Glu Leu Pro Ser Asn Arg Arg Pro Ser Val Val Gln Gln Pro Pro
1538          1205          1210          1215
1540 Ser Leu Arg Glu Arg Val Arg Gly Ser Pro Arg Phe Pro His Arg Ile
1541          1220          1225          1230
1543 Leu Pro Pro Thr Cys Ser Leu Ser Ala Leu Ala Glu Ser Glu Asp Arg
1544          1235          1240          1245
1546 Pro Gly Asp Ser Thr Ser Ile Leu Gly Ser Cys Lys Ser Ile Pro Arg
1547          1250          1255          1260
1549 Ile Ser Leu Gln Glu Val Thr Ser Gly Gly Thr Trp Lys Ser Met Glu
E--> 1550 265          1270          1275          1280
1552 Thr Val Gly Lys Ser Arg Leu Ser Leu Gly Asp Ser Gln Glu Glu Glu
1553          1285          1290          1295
1555 Glu Glu Ala Pro Ala Asn Gly Thr Gln
1556          1300          1305

```

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/715,962

DATE: 12/06/2000

TIME: 15:34:44

Input Set : A:\LeA34074.txt

Output Set: N:\CRF3\12062000\1715962.raw

Line ID:279 C: Current Application Number differs. Replaced Application Number  
Line ID:279 C: Current Filing Date differs. Replaced Current Filing Date  
Line ID:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
ID:32 Repeated in SeqNo:4  
Line ID:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:6  
ID:32 Repeated in SeqNo:6